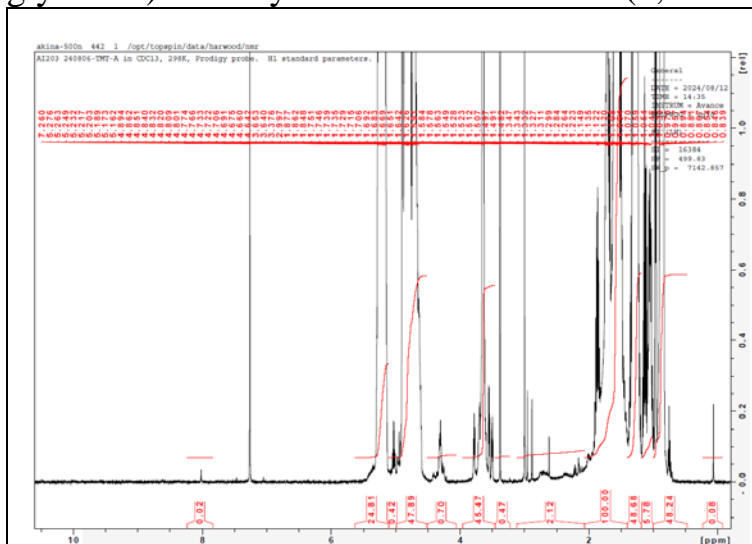


No. AI203

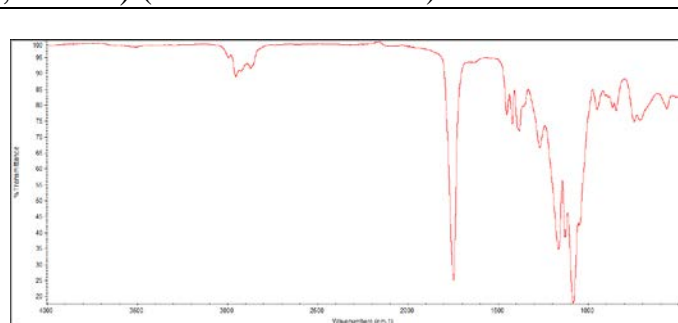
Certificate of Analysis



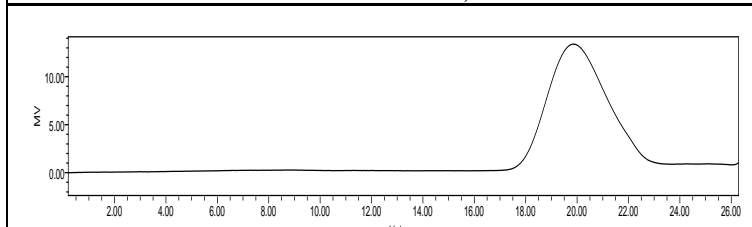
Product Name: Methoxy Poly(ethylene glycol)-b-Poly(lactide-co-glycolide) carboxylic acid LA:GA 50:50 (3,000:20,000 Da) (Lot#: 240806TMT-A)



H-NMR Spectrum of copolymers in CDCl₃ (Bruker ≥300 MHz, PINMRF)
NMR of PLGA-PEG-COOH copolymer: EG*/LA-GA =70*/153-147 (Mn EG*/LA:GA 3084*/11000-8558 Da) LA:GA 56%:44%



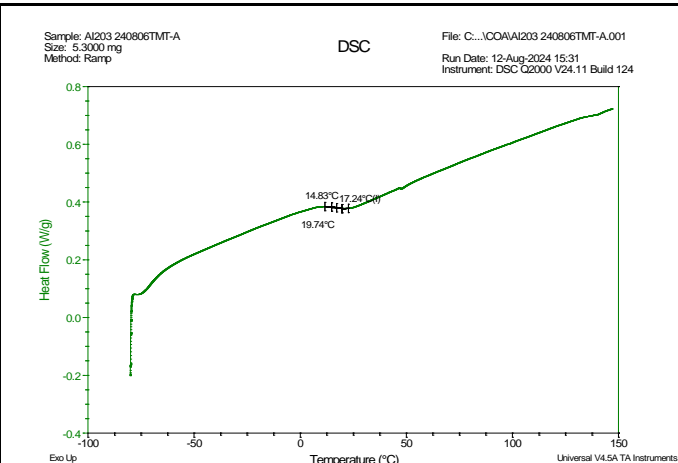
FTIR Analysis: Collected from IS5 ID7-ATR spectrometer (Thermo Scientific) and analyzed in transmission mode.



GPC-ES Analysis Method: Waters Breeze 2 system with 1 ml/min THF flow across three GPC columns. Detection via refractive index, calibrated against polystyrene standards.

| Polymer | M _n (from GPC) | M _w (from GPC) | PDI |
|----------------|---------------------------|---------------------------|------|
| PLGA-PEG-COOH | 18,986 | 28,582 | 1.68 |
| PEG-Precursor* | 3072* | | |

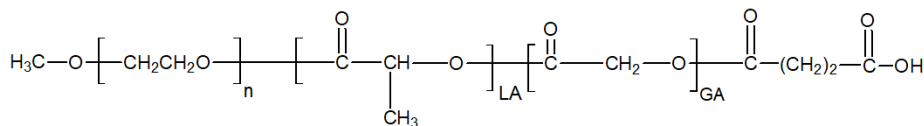
*- from MFG data



DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. T_g = 17.24 °C

Inherent Viscosity: 0.191 dL/g (calculated from kinematic viscosity at 2% w/v acetone on Rheosense microVISC, n=3) at 25°C.

Structure of mPEG-PLGA-COOH copolymer



Approved By:
Amie Tyler
Quality Manager